

PSYC 400.02	Applied Methods in Applied Psychology	Winter 2024	
<b>Instructor:</b>	Jeff Caird	<b>Lecture Location:</b>	SA 236
<b>Phone:</b>	403-220-8441	<b>Lecture Days/Time:</b>	TR 12:30–1:45
<b>Email:</b>	<a href="mailto:jkcaird@ucalgary.ca">jkcaird@ucalgary.ca</a>	<b>Teaching Assistant:</b>	Parker Townes
<b>Office:</b>	Admin. 222	<b>Email:</b>	<a href="mailto:parker.townes@ucalgary.ca">parker.townes@ucalgary.ca</a>
<b>Office Hours:</b>	Email for appointment	<b>Office Hours:</b>	By appointment

### Course Description

Students will apply and learn research methods, collect and analyze data, and interpret results in the field of *Human Factors Psychology*. Human factors uses a body of research and methods about human abilities (e.g., vision, attention, cognition, memory, motor), human limitations (e.g., multi-tasking, impairment), and other human characteristics (e.g., age, chronic disease) that are relevant to the design of technology and environments for human use.

### Course Learning Outcomes

The Department of Psychology is committed to student knowledge and skill development. The table below lists the key learning outcomes for this course, the program-learning outcomes they facilitate (see <https://live-arts.ucalgary.ca/psychology/about#program-learning-outcomes>), and the expected level of achievement.

Course Learning Outcomes	Assessment Methods	PLO(s)	Level(s)
Identify and explain research methodologies in human factors psychology.	Laboratory assignments	1,2,6,7	A
Apply common methods used in human factors psychology to a variety of contexts and problems.	Laboratory assignments, group activities	2,6,7	A
Communicate verbally and in writing research results from laboratories.	Lab. assignments	4, 7	A
Analyze and interpret human factors data.	Lab. assignments	2, 3 7	A, C
Students will search and synthesize knowledge on a specific topic.	Team project	1,4,5	A

Notes. PLOs = Program-Learning Outcomes: 1 = demonstrate knowledge of psychological sciences, 2 = think critically and solve problems, 3 = conduct research and analyze data, 4 = communicate effectively, 5 = demonstrate information literacy, 6 = understand and implement ethical principles in a diverse world, 7 = apply psychological knowledge and skills, 8 = Demonstrate multicultural competence and awareness of issues related to equity, diversity, and inclusion. Level of PLO achievement facilitated by this course: I = introductory, C = competency, A = advanced.

### Acknowledgments and Respect for Diversity

Our classrooms view diversity of identity as a strength and resource. Your experiences and different perspectives are encouraged and add to a rich learning environment that fosters critical thought

through respectful discussion and inclusion. The Department of Psychology would also like to acknowledge the traditional territories of the people of the Treaty 7 region in southern Alberta. The City of Calgary is also home to Métis Nation of Alberta (Districts 5 and 6).

### **Course Format**

This is an in-person class held on campus.

### **Prerequisites**

Admission to the Psychology major or Honours program and Psychology 300 and 301.

### **Anti-requisites**

Credit toward degree requirements will be given for only one of Psychology 400.01, 400.02, 400.03, 400.04, 400.05, 400.06, 400.07, or 400.08.

### **Required Text**

For background information on each applied topic, readings will be assigned. A list of papers will be provided on D2L that can be accessed through the library online. Students are expected to read assigned papers before class.

### **Assessment Methods**

Late assignments will not be accepted without instructor approval.

### **Distribution of Grades:**

Laboratory Assignments	50%
Team Project	30%
Team Presentations	10%
Class Participation	10%
Total	100%

**Laboratories (50%):** Seven laboratory activities are scheduled. Each laboratory is worth approximately 7% of the final grade. Laboratory assignments will typically be 2 to 3 pages in length. Several laboratory assignments may involve a group presentation to the class. A detailed handout for each laboratory will be provided on D2L that specifies activities, questions to be addressed and the due date. Typically, lab. assignments will be due one week after the completion of an activity. A dropbox in D2L will be provided for each lab. Emailed assignments will not be accepted.

If a student misses a class where a laboratory activity takes place, they are expected to inform the instructor and arrange, if approved by the instructor, to make up the activity. Without instructor approval, missed assignment dues dates will receive a 0.

**Team Project (30%):** Teamwork is fundamental to success in many life domains including science. A team project is an essential aspect of this course. Teams will be formed during lecture on Feb. 8<sup>th</sup>. In groups of 3 or 4, teams will select a project topic and discuss it with the TA and instructor during the week of February 13<sup>th</sup> and 15<sup>th</sup>. Groups are expected to self-manage by ensuring that each member contributes and that meeting times scheduled outside of class accommodate all members. If issues arise while working together and solutions cannot be achieved through mediation with group members, a

peer evaluation may be given to each team member to determine the relative contributions of each team member. In these cases, team project presentation and paper grades will be weighted based on the feedback from the peer evaluation.

After receiving feedback about their presentations, teams will submit their project papers by April 9<sup>th</sup> by 4:00 p.m. Papers should not exceed 15 pages in length (inclusive of cover page and references). Paper format, structure and content will be discussed in class and a marking rubric will be posted on D2L.

**Team Presentations (10%):** Teams will present their projects in class during the weeks of March 28<sup>th</sup> and April 4<sup>th</sup>. Team presentation dates will be quasi-randomly assigned. Presentations are expected to involve all team members. Presentations will be about 15 minutes including time for class questions. Presentation guidance will be included in the team project marking rubric posted on D2L. Missed presentations due to illness need to be approved by the instructor or receive a 0.

**Class Participation (10%):** Active participation in lectures and small group laboratory discussions is central to the learning objectives of this course. Students are expected to read assigned papers prior to lecture and laboratories and be prepared to discuss content and issues in class. At the beginning of some lectures, a non-graded quiz may be given to determine if students are prepared to engage in the course content. During laboratory activities, the TA and instructor will monitor and facilitate small group discussions. A pattern of missed classes and/or non-participation in activities by a student, unless discussed and cleared with the instructor, will negatively impact class participation points.

Once approved by the course instructor, and at their discretion, alternative arrangements for missed assessments may be considered <https://www.ucalgary.ca/pubs/calendar/current/g-1-2.html>. Students may be asked for documentation <https://www.ucalgary.ca/pubs/calendar/current/m-1.html>.

### **University of Calgary Academic Integrity Policy**

Academic integrity is the foundation of the development and acquisition of knowledge and is based on values of honesty, trust, responsibility, and respect. We expect members of our community to act with integrity.

Research integrity, ethics, and principles of conduct are key to academic integrity. Members of our campus community are required to abide by our institutional code of conduct and promote academic integrity in upholding the University of Calgary's reputation of excellence. It is your responsibility to ensure that you have read and are familiar with the student academic misconduct policy: <https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Student-Academic-Misconduct-Policy.pdf>.

### **Department of Psychology Criteria for Letter Grades**

Psychology course instructors use the following criteria when assigning letter grades:

**A+ grade: *Exceptional Performance.*** An A+ grade indicates near perfect performance on multiple choice and short answer exams. For research papers/essays/course projects/presentations, an A+ grade is awarded for exceptional work deserving of special recognition and is therefore not a common grade.

**A, A- Range: *Excellent Performance.*** Superior understanding of course material. Written work is very strong in terms of critical and original thinking, content, organization, and the expression of ideas, and demonstrates student's thorough knowledge of subject matter.

B Range: *Good Performance*. Above average understanding of course material. Written work shows evidence of critical thinking and attention to organization and editing but could be improved in form and/or content.

C Range: *Satisfactory Performance*. Adequate understanding of course material. Knowledge of basic concepts and terminology is demonstrated. Written work is satisfactory and meets essential requirements but could be improved significantly in form and content. Note: All prerequisites for courses offered by the Faculty of Arts must be met with a minimum grade of C-.

D range: *Marginally meets standards*. Minimal understanding of subject matter. Written work is marginally acceptable and meets basic requirements but requires substantial improvements in form and content. Student has not mastered course material at a level sufficient for advancement into more senior courses in the same or related subjects.

F grade: *Course standards not met*. Inadequate understanding of subject matter. Written work does not meet basic requirements. Student has not demonstrated knowledge of course material at a level sufficient for course credit.

### Grading Scale

A+	96-100%	B+	80-84%	C+	67-71%	D+	54-58%
A	90-95%	B	76-79%	C	63-66%	D	50-53%
A-	85-89%	B-	72-75%	C-	59-62%	F	0-49%

To determine final letter grades, final percentage grades will be rounded up or down to the nearest whole percentage (e.g., 89.5% will be rounded up to 90% = A but 89.4% will be rounded down to 89% = A-).

### Important Dates

Date	Important Dates
T Jan 9	First day of lectures
R Jan 18	Last day to drop a class without financial penalty
F Jan 19	Last day to add or swap a course
F Jan 26	Fee payment deadline for Winter Term full and half courses.
Feb 18-24	Term Break, no classes
T Apr 9	Winter Term Lectures End. Last day to withdraw with permission from Fall Term half courses.
Apr 12-23	Winter Final Exam Period

### Tentative Class Schedule

Date	Topic/Activity/Readings/Due Date
T Jan 9	Review Syllabus
R Jan 11	Overview of Human Factors Psychology (HF)
T Jan 16	Heuristic Evaluation of a Medical Device ( <b>Lab. 1, Due: Jan. 23</b> )
R Jan 18	Physical Ergonomics and Accessibility
T Jan 23	Wheelchair Accessibility Lab. ( <b>Lab. 2, Due: Jan. 30</b> )
R Jan 25	Aging HF

T Jan 30	Aging Lab. ( <b>Lab. 3, Due: Feb. 6</b> )
R Feb 1	Perception, Cognition and Pictorial Comprehension
T Feb 6	Signs, Icons and Pictorial Lab. ( <b>Lab. 4, Due: Feb. 13</b> )
R Feb 8	Overview of Research Synthesis
T Feb 13	Team Project, Meet with Instructor
R Feb 15	Team Project, Meet with Instructor
Feb 18-24	Term Break
T Feb 27	Home Office Ergonomics
R Feb 29	Home Office Lab. ( <b>Lab. 5, Due: March 12</b> )
T Mar 5	Environmental Psychology Overview (EP)
R Mar 7	Nature Restoration
T Mar 12	Nature Restoration Lab. ( <b>Lab. 6, Due: March 19</b> )
R Mar 14	Climate Change EP
T Mar 19	Environmental Impact Lab. ( <b>Lab. 7, Present: March 26</b> )
R Mar 21	Present Lab. Results in Class
T Mar 26	<b>Team Presentations</b>
R Mar 28	<b>Team Presentations</b>
T Apr 2	<b>Team Presentations</b>
R Apr 4	<b>Team Presentations</b>
T Apr 9	No Class, <b>Team Project Papers Due by 4:00 p.m.</b>

**Extra Research Participation Course Credit is Not Offered for this Course.**

### **Seating During Exams**

Instructors and exam invigilators are free to ask students to move seats before an exam begins or even during an exam. Students must comply with this request and refusal to do so may warrant a charge of academic misconduct.

### **Absence From Test/Exam**

Makeup tests/exams are **NOT** an option without the approval of the instructor

<https://www.ucalgary.ca/pubs/calendar/current/g-1-1.html> At the instructor's discretion, a makeup test/exam may differ significantly (in form and/or content) from a regularly scheduled test/exam. Once approved by the instructor a makeup test/exam must be written within 2 weeks of the missed test/exam on a day/time scheduled by the instructor. If a student cannot write their final exam on the date assigned by the Registrar's Office, they need to apply for a deferred exam

<https://www.ucalgary.ca/registrar/exams/deferred-exams>

### **Travel During Exams**

Consistent with University regulations, students are expected to be available to write scheduled exams at any time during the official December and April examination periods. Requests to write a make-up exam because of conflicting travel plans (e.g., flight bookings) will NOT be considered by the department. Students are advised to wait until the final examination schedule is posted before making any travel arrangements. If a student cannot write their final exam on the date assigned by the Registrar's Office, they need to apply for a deferred exam [Deferred Final Exams | University of Calgary](#)

[ucalgary.ca](http://www.ucalgary.ca)) Students with an exceptional extenuating circumstance (e.g., a family emergency) should contact the Department of Psychology [psyugrd@ucalgary.ca](mailto:psyugrd@ucalgary.ca)

**Reappraisal of Graded Term Work** <http://www.ucalgary.ca/pubs/calendar/current/i-2.html>

**Reappraisal of Final Grade** <http://www.ucalgary.ca/pubs/calendar/current/i-3.html>

### **Academic Accommodations**

Students seeking an accommodation based on disability or medical concerns should contact Student Accessibility Services; SAS will process the request and issue letters of accommodation to instructors. For additional information on support services and accommodations for students with disabilities, visit [www.ucalgary.ca/access/](http://www.ucalgary.ca/access/). Students who require an accommodation in relation to their coursework based on a protected ground other than disability should communicate this need in writing to their Instructor. The full policy on Student Accommodations is available at <https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Student-Accommodation-Policy.pdf>.

### **Academic Misconduct**

For information on academic misconduct and its consequences, please see the University of Calgary Calendar at <http://www.ucalgary.ca/pubs/calendar/current/k.html>

### **Instructor Intellectual Property**

Course materials created by professor(s) (including course outlines, presentations and posted notes, labs, case studies, assignments, and exams) remain the intellectual property of the professor(s). These materials may NOT be reproduced, redistributed, or copied without the explicit consent of the professor. The posting of course materials to third party websites such as note-sharing sites without permission is prohibited. Sharing of extracts of these course materials with other students enrolled in the course at the same time may be allowed under fair dealing.

### **Copyright Legislation**

All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright

([https://library.ucalgary.ca/services/copyright?\\_gl=1\\*bcjlpn\\*\\_ga\\*OTY1ODc0Njg0LjE2NjkxNTA1NTM.\\*\\_ga\\_X4GN9Y4W7D\\*MTY3Nzc5MjM3Ni4xNy4xLjE2Nzc3OTI4MDYuMC4wLjA](https://library.ucalgary.ca/services/copyright?_gl=1*bcjlpn*_ga*OTY1ODc0Njg0LjE2NjkxNTA1NTM.*_ga_X4GN9Y4W7D*MTY3Nzc5MjM3Ni4xNy4xLjE2Nzc3OTI4MDYuMC4wLjA)) and requirements of the copyright act (<https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html>) to ensure they are aware of the consequences of unauthorized sharing of course materials (including instructor notes, electronic versions of textbooks etc.). Students who use material protected by copyright in violation of this policy may be disciplined under the Non-Academic Misconduct Policy.

### **Freedom of Information and Protection of Privacy**

Student information will be collected in accordance with typical (or usual) classroom practice. Students' assignments will be accessible only by the authorized course faculty. Private information related to the individual student is treated with the utmost regard by the faculty at the University of Calgary

### **Student Support and Resources**

<https://www.ucalgary.ca/registrar/registration/course-outlines>

**Important Dates**

The last day to drop this course with no “W” notation and **still receive a tuition fee refund** is **Thursday, January 18<sup>th</sup>, 2024**. Last day add/swap a course is **Friday, January 19<sup>th</sup>, 2024**. The last day to withdraw from this course is **Tuesday, April 9<sup>th</sup>, 2024**.